



Billing Code 3510-60-P

DEPARTMENT OF COMMERCE

National Telecommunications and Information Administration

[Docket No. 120322212-2212-01]

Spectrum Sharing Innovation Test-Bed Pilot Program

AGENCY: National Telecommunications and Information Administration, U.S.

Department of Commerce.

ACTION: Notice, Request for Comments.

SUMMARY: This notice describes and seeks comment on the types and depth of testing that the National Telecommunications and Information Administration (NTIA) intends to conduct in Phase II/III of the Spectrum Sharing Innovation Test-Bed pilot program to assess whether devices employing Dynamic Spectrum Access techniques can share the frequency spectrum with land mobile radio systems.

DATES: Comments are due on or before [insert date 30 days after publication in the *Federal Register*].

ADDRESSES: Comments should be sent to the attention of Ed Drocella, Office of Spectrum Management, 1401 Constitution Avenue, N.W., Room 6725, Washington DC, 20230; by facsimile transmission to (202) 482-4595; or by electronic mail to testbed@ntia.doc.gov.

FOR FURTHER INFORMATION CONTACT: Ed Drocella at 202-482-2608 or edrocella@ntia.doc.gov.

SUPPLEMENTARY INFORMATION:

I. Background

NTIA, in coordination with the Federal Communications Commission (FCC) and other federal agencies, established a Spectrum Sharing Innovation Test-Bed (Test-Bed) pilot program to examine the feasibility of increased sharing between federal and non-federal users. This pilot program is an opportunity for federal agencies to work cooperatively with industry, researchers, and academia to objectively evaluate new technologies that can improve management of the nation's airwaves.

The Test-Bed pilot program is evaluating the ability of Dynamic Spectrum Access (DSA) devices employing spectrum sensing and/or geo-location techniques to share spectrum with land mobile radio (LMR) systems operating in the 410-420 MHz federal band and in the 470-512 MHz non-federal band.¹ To address potential interference to incumbent spectrum users, the Test-Bed will include both laboratory and field measurements performed in three phases:

Phase I – Equipment Characterization. Participants will send equipment employing DSA techniques to the NTIA Institute for Telecommunication Sciences in Boulder, Colorado to undergo characterization measurements of the DSA capabilities in response to simulated environmental signals.

Phase II – Evaluation of Capabilities. After successful completion of Phase I, NTIA will evaluate the DSA spectrum sensing and/or geo-location capabilities of the equipment in the geographic area of the Test-Bed.

Phase III – Field Operation Evaluation. After successful completion of Phase II,

¹ Dynamic Spectrum Access technology allows a radio device to (i) evaluate its radio frequency environment using spectrum sensing, geo-location, or a combination of spectrum sensing and geo-location techniques, (ii) determine which frequencies are available for use on a non-interference basis, and (iii) reconfigure itself to operate on the identified frequencies.

NTIA will permit the DSA equipment to transmit in an actual radio frequency signal environment. An automatic signal logging capability will be used during operation of the Test-Bed to help resolve interference events if they occur. NTIA and the participant will establish a point-of-contact to stop Test-Bed operations if interference is reported.

NTIA published the Phase I test plan in the **Federal Register** for public review and comment in December 2008.² NTIA addressed the public comments on the test plan and published a final version on the NTIA website in February 2009.³ The annual progress reports provide the status of the Phase I testing.⁴

II. Request for Comments

NTIA has established a review process to give the public an opportunity to participate in the development of test plans for the Test-Bed pilot program.⁵ A copy of the draft Phase II/III test plan is available in Word, and PDF formats on the following website:

<http://www.ntia.doc.gov/category/spectrum-sharing?page=1>.

On or before [insert date 30 days after publication in the *Federal Register*], interested parties wishing to comment on the draft Phase II/III test plan should submit to the address set forth above, their name, address, phone number, e-mail address and their

² Spectrum Sharing Innovation Test-Bed Pilot Program, 73 Fed. Reg. 76,002 (Dec. 15, 2008).

³ The final Phase I test plan and additional information on the Test-Bed pilot program are available at <http://www.ntia.doc.gov/category/spectrum-sharing?page=1>.

⁴ The annual progress reports and additional information on the Test-Bed pilot program are available at <http://www.ntia.doc.gov/category/spectrum-sharing?page=1>.

⁵ There are certain limitations on the public review process to take into account the proprietary rights of the developers participating in the Test-Bed. As part of the Test-Bed, NTIA may enter into Cooperative Research and Development Agreements or Joint Project Agreements with the equipment developers.

comments. NTIA seeks comments on the types and depth of testing that NTIA intends to conduct in Phase II/III of the Spectrum Sharing Innovation Test-Bed pilot program to assess whether devices employing Dynamic Spectrum Access techniques can share the frequency spectrum with land mobile radio systems. Comments will be posted on NTIA's Web site at <http://www.ntia.doc.gov/category/spectrum-sharing?page=1>.

NTIA will publish the final version of the Phase II/III test plan on its website.

Dated: March 22, 2012_____.

Kathy D. Smith,

Chief Counsel, National Telecommunications and Information Administration.

[FR Doc. 2012-7373 Filed 03/27/2012 at 8:45 am; Publication Date: 03/28/2012]